DOCUMENT RESUME

ED 256 756 SP 026 089

AUTHOR Hall, Carroll L.
TITLE Preparing Teachers for the Future: Gazing Into the VDT.
PUB DATE 7 Nov 84
NOTE 9p.; Paper presented at the Vocational-Technical Teachers Education Conference (Ruidoso, NM, November 7, 1984).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141) -- Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Higher Education; Job Satisfaction; Teacher Education; *Teacher Recruitment; Teacher Salaries; *Teacher Shortage; Teacher Supply and Demand; *Teaching (Occupation); Teaching Conditions; Trend Analysis

ABSTRACT

In considering the problem of raising the professional stature of the teaching profession, a review is presented of current statistics on: (1) shortages of mathematics and science teachers; (2) declining enrollment in teacher education programs; (3) widening gap in supply and demand for teachers; (4) current and future shortages of teachers; (5) difficulty in attracting academically able students; (6) teacher salaries compared to other professions; (7) teacher dissatisfaction with working conditions; (8) decline in the academic ability of students planning to become teachers; (9) diversity of standards for teacher certification; (10) admission standards for education programs; and (11) merit pay and incentive programs. Some recommendations are made for improving teacher preparation and attracting able students. (JD)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED256756

PREPARING TEACHERS FOR THE FUTURE: GAZING INTO THE VDT

Prepared by
Carroll L. Hall
State Director of
Evaluation, Testing, and Data Management
New Mexico State Department of Education
Santa Fe, New Mexico

SP026089

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Presentation to
The Vocational-Technical Teachers
Education Conference
Ruidoso, N.M. - November 7, 1984

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

C.L. Hall

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

PRESENTATION TO THE VOCATIONAL-TECHNICAL TEACHERS EDUCATION CONFERENCE
RUIDOSO, N.M. - NOVEMBER 7, 1984

PREPARING TEACHERS FOR THE FUTURE: GAZING INTO THE VDT

What does VDT stand for? It stands for Video Display Terminal which is also known as a CRT or Cathode Ray Tube. It is the television monitor connected to the computer. We no longer gaze into crystal balls to make predictions. Instead we examine data banks displayed by the VDT. Sometimes, though, it seems we have as much success gazing into the crystal ball as the computer, especially if you look backward and evaluate the predictions based on particular data sets. I am reminded that hindsight is an exact science. But I believe that the information shown by the VDT on the coming crises in education will prove to be very close to what actually happens.

Education today is faced with a problem which will soon become a crisis. The problem presently is the nationwide shortage of qualified people to teach math and science. We are also beginning to experience shortages in the areas of English and social studies. According to a Rand Study by Linda Darling-Hammond, the shortage of these specialized teachers will be followed by a more general shortage of qualified teachers to the extent that by 1988, four years from now, the supply of new teacher graduates may satisfy only about 80% of the demand for additional teachers.

While today one-third more people are going to college than a decade ago, one-third fewer are enrolled in teacher education programs. Of even more concern is the statistic that the number of actual teacher graduates has dropped by 53% for the same time period while the number of degrees in medicine has increased by 74%, in engineering by 90%, and law degrees have more than doubled. In 1983, there were approximately 135,000 graduates of teacher education programs compared with approximately 289,000 in 1973. Let's take a look at the institutions which are producing our teacher graduates.

According to a survey conducted by the National Center for Education Information of deans of education and reported by C. Emily Feistritzer in The Making of a

Teacher, in 1973 there were 688,000 students in teacher preparation programs at 1,172 colleges and universities. In 1983, there were 115 more institutions with teacher preparation programs for a total of 1,287 with a total enrollment of only 444,000 - 35% less. Approximately half of all new teachers receive their education in the 17% of the college and university training programs in this nation which are at institutions enrolling ten thousand students or more. This is also where the most severe decline in new teacher graduates has occurred, 57% between 1973 and 1983. During the same time period, for programs at institutions with enrollments under 10,000, the decline has been 50%, but there are 113 more institutions in this category and 41 fewer in the 10,000 plus category. For the category of institutions with enrollment under 1,000, there has been a 51% increase since 1973. It is estimated that more than 200 institutions preparing teachers (15%) have less than 50 students enrolled and are graduating fewer than 10 students a year. Information on the public and private institutions shows that 80% of new teacher graduates come from public colleges and universities. The number of new teacher graduates from our public institutions declined more than at private institutions in the last decade - 54% compared with 48%. One explanation for this is the proliferation of smaller colleges now offering programs for teacher preparation, which tend to be privately controlled. The important point to remember from this is that we have approximately half as many new teacher graduates as we had a decade ago, and that there are fewer large institutions providing training, but many more small private schools engaged in this activity.

As we examine the decrease in the supply of new teacher graduates we must realize that information from the National Center for Education Statistics, shows school enrollments increasing steadily in the late 1980's and early 1990's. Retirement rates will increase as a cadre of experienced teachers reach retirement age. Reform measures such as increasing high school graduation requirements will require more teachers. Coupled with these factors will be the pressure to remove incompetent teachers who will need to be replaced.

Yet, the latest supply and demand estimates for teachers indicate that the supply of new teachers will continue to drop each year for the next decade, and by 1992 supply will only meet two-thirds of the demand for additional elementary and secondary classroom teachers. But we won't need to wait until 1992 to realize the shortage. We know that approximately 80% of all students admitted into

teacher education programs eventually graduate. Based on the 80% completion rate, the crop of students who entered teacher preparation programs will produce only 88,000 graduates. In 1986, there is a projected demand for 170,000 additional teachers.

The predicted teacher shortage is certainly not the first this nation has experienced, but unlike the teacher shortages in the fifties and sixties, attributable to the post-war baby boom, there are new reasons for the coming teacher shortage which include expanded opportunities for minorities and women. Women have historically made up 70% of the teaching force but bright young women are now choosing among many other professions in which to establish a career. In the past, teaching was the highest profession women aspired to but one-third of all law degrees in 1982 were conferred on women compared with 3% in 1965. They received one-quarter of the medical degrees in 1982 compared with 6% in the mid sixties. In 1965, 1% of dental degrees were received by women as compared to 15% in 1982. If education is to become a viable option for bright women, it must become more attractive as a profession.

Another important reason teaching has lost its ability to attract academically able students is the current salary offerings which provide no strong motivation. Beginning salaries for teachers are lower than those in virtually any other field which requires a Bachelor's degree. This holds true even when teaching salaries are adjusted to reflect a twelve month salary equivalent. After entry to the profession, salaries for teachers reach a ceiling much sooner and at a much lower level than do the salaries for other college graduates. Relative to other occupations, teachers' salaries have lost ground by nearly 15% in real dollar terms between 1971 and 1981 in spite of collective bargaining even though the average experience level of teachers has increased over that period as well as the average educational level with the majority of teachers now having at least a Master's degree and 13 years of experience. Within other professions, such as law, medicine, accounting, and nursing, there is a wide range from starting salary to peak salary. They also have ranges in each salary category determined not only by education and experience but also competence.

The salary data is certainly disheartening, but studies have suggested that people teach for altruistic reasons - they love to work with children and want

to make a contribution to society. However, in NEA polls, a question has been asked for many years regarding whether a person, if they were to start their professional training over again, would still become a teacher. Between 1971 and 1981, the respondents saying they would not teach again more than tripled, rising from about 10% to almost 40%. Less than half of the present teaching force say they plan to continue teaching until retirement. The factor which most contributes to this dissatisfaction is a lack of support - physical support in terms of facilities and materials, support services such as help for duplicating and paperwork, and administrative support that provides an environment in which their work is valued and supported.

A particular concern of teachers' dissatisfaction with their working conditions is that the most highly qualified teachers are the most dissatisfied. Teachers with academic majors, those who have a Bachelor's or Master's degree in their discipline in addition to a teaching certificate, are more dissatisfied with the lack of administrative support for their work, with bureaucratic interference, with the lack of autonomy, and with salaries and other working conditions than are those with education degrees only. Academic majors have typically taken substantially more college course work in their area of specialization than education majors and they tend to also be the teachers who hold more advanced degrees.

Let's examine the general decline in academic ability of students planning to become teachers as measured by college admission test scores. Over the past decade, the scores of potential education majors have declined more rapidly than those of other students. Most would be teachers are from the bottom of the test takers; most of the few top scorers who are recruited to education leave the profession quickly. In 1983-84, the combined SAT score for those education-bound students was 823 compared to the national average of 897, a difference of 74 points. For the ACT, education majors had a composite score of 17.2 compared to the national overall average of 18.5, a difference of 1.3. It is uncertain as to what this information really means when nationally 82% of the deans responding to the NCEI survey indicated that they do not use a SAT or ACT cutoff score as an entrance requirement for teacher preparation programs.

If institutions are not utilizing test information for entrance purposes, the same generally holds true nationally for exit tests. Only 47% responding to the

NCEI survey require passage of a test of any kind for completion of their teacher education programs. Five (5%) percent reported requiring prospective teachers, completing their program, to pass a content area test. Eleven (11%) percent require leaving students to pass a basic skills test. Eighteen (18%) percent administer the National Teachers' Examination, and 13% require passage of some "other test" upon completion of the program.

What about the certification of classroom teachers in the U.S.? Nationally, the process has been described as a mess. The numbers of different types of certificates and endorsements and what is required to get one is amazing. Many requirements don't seem to make much sense especially in view of the pending shortage. For example, a person certified to teach U.S. government in one state cannot be certified to teach American history in that state but in another state that same teacher could not only teach American history but also political science. In 48 states plus the District of Columbia, a requirement for acquiring a teaching certificate is graduation from a program approved by the state. Some states offer an alternative to the approved program route but all require a baccalaureate degree. Other requirements for certification include, in 18 states, passage of some kind of paper-pencil test with 30 more planning within the next three years to require passage of a test before issuing a credential. Only seven states currently require an on-the-job post college-graduation internship before full certification. An additional 18 states are planning to introduce an internship requirement.

In terms of entry requirements, the NCEI also checked with associations that represented law, medicine, accounting, and nursing to see how their occupations compare with teaching. All of these professions require passage of a national proficiency examination before being licensed to practice. With the exception of nursing, all are considerably more selective than teaching about who actually enters the profession. These occupations also have career ladders based not only on education and experience but also on professional competence. Teaching, for the most part, does not.

This last point, however, appears to be changing as all but 18 states are in some stage of examining alternatives to college teacher education programs for certifying teachers. Eight (8) states have already implemented alternative routes with an additional 8 having proposed alternatives and 11 more considering

alternatives. As it turns out, one-half of all the states that said they are implementing alternatives for certifying teachers are giving a provisional certificate until further requirements are fulfilled.

Other activities being carried on by states include all but 16 doing something about merit pay plans, all but 12 about the master teacher concept, all but 12 are looking at career ladders, all but 10 are doing something about raising teachers' salaries, and all but 15 are looking at periodic statewide performance evaluation of teachers. Sixteen states are already implementing these evaluations, including New Mexico. Seven states are implementing some version of the master teacher concept, and an additional seven are implementing some form of a career ladder approach for rewarding especially competent teachers.

We have been gazing into the VDT and have seen a lot of numbers. But, these are meaningless if they are not used to upgrade teaching to a true professional status. To quote Ferstritzer, "Nothing in American education is in greater need of reform than the way we educate and certify classroom teachers. Teaching will never be truly a profession until it adopts standards of excellence and sets up uniform, effective criteria for selecting, training, and placing those who are genuinely qualified." Higher salaries, status, and prestige for teachers will not be forthcoming until these matters are addressed; until "rites of passage" selection procedures at the entry level are adopted as well as standards of excellence and competence on-the-job are routinely expected.

I would bring to your attention that our situation today is analogous to the medical profession more than 100 years ago. In the early 1800's a graduate of a "chartered" medical school could qualify for a licensure to practice medicine in most states. Since such charters were easy to come by, there was a proliferation of medical schools offering the lowest quality of education and frequently granting debased degrees. In 1847, the American Medical Association was formed, chiefly to deal with this situation. But it was not until almost 1900 that most states had established state examining boards. In 1910 the Flexner Report on the quality of medical education was issued; within five years 40% of all medical schools had closed their doors.

What can be done to raise the professional stature of our profession, in the areas of attracting academically qualified students into our teacher preparation programs, preparing these students, licensing them, and finally retraining and

retaining competent teachers? Solutions will require the cooperation and combined efforts of the state department of education, teacher preparation programs, and the schools. Possible areas which can be addressed include how we can: urge federal officials to earmark some portion of federal financial aid to college students who are highly able individuals to careers in elementary and secondary teaching; promote the use of legitimate alternatives, nontraditional methods of assigning qualified persons to the classroom who have not selected teaching as their primary career goal; increase the amount of time devoted to learning pedagogic skills and the evaluation of student's progress in training to become a teacher; develop alternative approaches to certifying persons desiring to enter the teaching profession utilizing work experience or the use of competency measures on at least a provisional basis; achieve comparability of standards for teacher preparation programs in New Mexico; provide higher salaries, master teacher programs, and incorporate differentiated staffing structures within our schools; set aside a percentage of the budget for the professional development of our elementary and secondary teachers; and provide for upgrading and retraining faculty members in our teacher preparation program by finding ways to return them to the K-12 classroom for a period of time with given responsibilities.

The tasks are not easy but they can be done. Through cooperative efforts we can achieve what needs to be accomplished in the areas of recruiting, training, and retaining quality educators with the rewards being reaped by all associated with education.